



Connect an Arduino to a \$7 Bluetooth Serial Module

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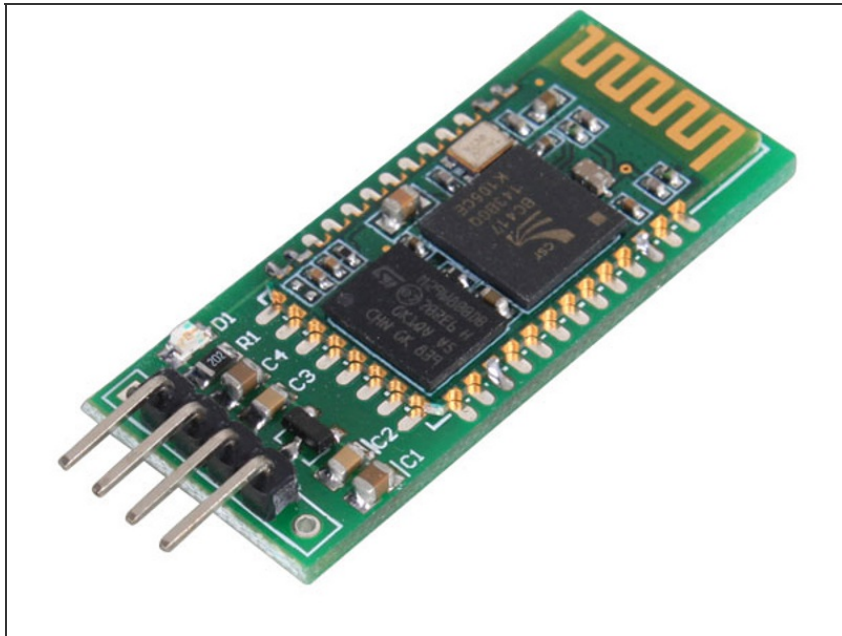
PARTS:

- [Arduino Uno \(1\)](#)
- [Bluetooth serial module \(1\)](#)

SUMMARY

The Arduino microcontroller board is a fantastic starting point for electronic and physical computing projects. As the standard Arduino board does not offer any wireless connection, such as WLAN or Bluetooth, this project shows how to easily connect a \$7 Bluetooth serial module to your Arduino. The Bluetooth serial module enables your microcontroller board to communicate with every Bluetooth-equipped device, such as laptops, tablet PCs or smartphones.

Step 1 — Connect an Arduino to a \$7 Bluetooth Serial Module



- The image shows a \$7 Bluetooth serial module that you can readily find on [eBay](https://www.ebay.com). It offers 4 pins (5V, Ground, RX and TX), that you have to connect with the right pins on your Arduino Uno board. No additional electronic parts are necessary.

Step 2



- You will need to identify the 5V and Ground pins on your Arduino in order to provide the power source for activating your Bluetooth serial module. Connect the Bluetooth module's RX pin to the Arduino's TX pin. Connect the Bluetooth module's TX pin to the Arduino's RX pin.

Step 3

- After connecting the Bluetooth serial module to your Arduino you are able to pair the Bluetooth module with any Bluetooth-enabled device. Use '1234' as the pairing key.
- There is no additional library necessary for communication. The Bluetooth module replaces a normal serial cable on RX and TX.
- The Arduino code for writing to the Bluetooth serial module is quite simple:

```
void  
setup() { Serial.begin(9600); } void loop() {  
Serial.println("test"); delay(1000); }
```
- For receiving the output on your PC just open a terminal program, or Putty, and connect to the COM port of your Bluetooth Serial profile (e.g. COM3 on my PC).

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